



## SOUTHWEST ENERGY EFFIC

*Saving Money and Protecting the Environment Through more Efficient Energy Use*



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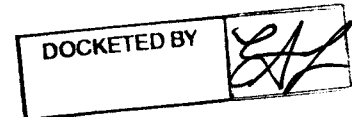
January 23, 2014

Bob Stump, Chairman  
Gary Pierce, Commissioner  
Brenda Burns, Commissioner  
Susan Bitter Smith, Commissioner  
Bob Burns, Commissioner

Arizona Corporation Commission  
1200 West Washington  
Phoenix, AZ 85007-2996

Arizona Corporation Commission  
DOCKETED

JAN 23 2014



**Re: E-00000J-13-0375, In the matter of the Commission's Inquiry into Potential Impacts to the Current Utility Model Resulting from Innovation and Technological Developments in Generation and Delivery of Energy**

Dear Chairman Stump and Commissioners:

The Southwest Energy Efficiency Project (SWEEP) appreciates the opportunity to provide these comments in response to Commissioner Bob Burn's December 5, 2013, letter requesting input on the proposed process to explore major technological innovations that could impact the energy utility model.

### Feedback on the Workshop Scope

SWEEP supports the Commission's inquiry, especially as it relates to understanding technological innovations that will reduce customer utility bills; lower total customer costs; and improve customer service. As the Commission evaluates and considers emerging technologies, SWEEP encourages the Commission to discuss the following questions:

- Who stands to benefit from these innovations (the residential ratepayer? the commercial ratepayer? the utility company?)? How will these different entities benefit?
- Will deployment of these innovations increase or decrease total customer costs?
- Will these innovations provide customers with better options and tools to manage and reduce their energy usage and utility bills?
- How will these innovations improve the quality of customer service and meet customer needs? And,
- What opportunities exist to improve regulatory structures and processes to support and accelerate investments that lower total customer costs?

SWEEP also feels it is important for the workshops to cover the effects of technologies on the utility business model, including the business, financial, and regulatory impacts.



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### Workshop Topics & Recommended Speakers

SWEEP supports the topic areas identified by Commissioner Bob Burns. SWEEP encourages the Commission to discuss the following innovations and emerging technologies as part of its investigation:

#### **1. Advanced Analytics Platforms to Help Commercial and Industrial (C&I) Customers Reduce Their Energy Bills**

SWEEP recommends that the Commission explore advanced building assessment and energy management tools as part of the second workshop topic. These tools leverage advanced data analytics, interval consumption data, and behavioral science to help C&I customers learn about their building's energy performance, achieve energy savings, and reduce their utility bills. These tools have great potential to increase utility bill savings, achieve better customer outcomes, and reduce the cost and time of energy efficiency program delivery.

An example of one of these tools is the FirstFuel analytics platform. The FirstFuel platform uses utility-meter, weather, satellite, and other data to remotely identify energy efficiency opportunities in commercial buildings. As such it eliminates the need for initial on-site energy assessments and reduces energy efficiency program delivery costs. In addition to providing a "no-touch" initial energy audit, the platform validates savings from energy efficiency installations and provides ongoing energy management support to customers. Other firms that have developed similar commercial and industrial platforms include: Aclara, C3 Energy, and Retroficiency.

SWEEP recommends the following speakers on this topic:

- Sam Krasnow, Vice President, Regulatory Affairs and Market Development, FirstFuel. Contact: [skrasnow@firstfuel.com](mailto:skrasnow@firstfuel.com). See also: [www.firstfuel.com](http://www.firstfuel.com).
- Tom Siebel, Chief Executive Officer, C3 Energy. Contact: [tom.siebel@c3energy.com](mailto:tom.siebel@c3energy.com) and [support@c3energy.com](mailto:support@c3energy.com). See also: [www.c3energy.com](http://www.c3energy.com).

SWEEP also encourages the Commission to review the presentations and information from Connecticut's recent investigation into these C&I tools:

<https://app.box.com/s/qmm57kdtvwp8hszfl5h/1/1477030727>

#### **2. Customer Engagement Platforms, Behavior Programs, and Customer Feedback Devices/Smart Thermostats to Help Residential Customers Reduce Their Energy Bills**

A variety of applications and customer engagement approaches, including online customer engagement platforms, field tools to support on-site energy assessments, stand-alone programs focused on influencing customer behavior, and customer feedback devices (including smart thermostats), are being developed and deployed to help customers save money on their energy bills. Examples of firms deploying such products include: Opower,



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C3 Energy, NEST, and Tendril.

SWEEP recommends the following speakers on this topic:

- Tom Siebel, Chief Executive Officer, C3 Energy. Contact: [tom.siebel@c3energy.com](mailto:tom.siebel@c3energy.com) and [support@c3energy.com](mailto:support@c3energy.com). See also: [www.c3energy.com](http://www.c3energy.com).<sup>1</sup>
- Doug Sweeny, VP of Marketing, NEST. Contact: Kate Brinks, Corporate Communications, NEST, [kate@nestlabs.com](mailto:kate@nestlabs.com) and [press@nestlabs.com](mailto:press@nestlabs.com). See also: [www.nest.com](http://www.nest.com).

SWEEP also encourages the Commission to review the presentations and information from Connecticut's recent investigation into these residential approaches:

<https://app.box.com/shared/05524391e4c9e870b2e0>

### 3. The Integration of Energy Efficiency and Demand Response

Both energy efficiency and demand response have been important in expanding demand side resources and managing/reducing energy use and peak demand in recent years. Many new technologies and evolving customer service models are exploring ways to integrate these two resources in order to enhance customer value, achieve program efficiencies, deliver greater utility bill savings and peak demand reductions, and provide a more comprehensive approach to customer energy management. Examples of firms deploying integrated energy efficiency and demand response products and services include: EnerNOC and Nexant.

SWEEP recommends the following speakers on this topic:

- Jon Wellinghoff, Former Chairman, Federal Energy Regulatory Commission. Contact: [jbwellinghoff@stoel.com](mailto:jbwellinghoff@stoel.com). For additional contact information see: <http://www.stoel.com/showbio.aspx?Show=10919>
- Mona Tierney Lloyd, Director, Western Regulatory Affairs, EnerNOC. Contact: [mtierney-lloyd@enernoc.com](mailto:mtierney-lloyd@enernoc.com) and 805-995-1618. See also: [www.enernoc.com](http://www.enernoc.com)

### 4. Electric Vehicles

Increased use of electric vehicles (EVs) will impact electric load and the utility industry in the future. SWEEP has conducted several economic analyses on the significant benefits Arizona will realize from increased EV deployment. According to our analyses, EV drivers will save between \$700 and \$1,400 annually on fuel costs. In addition, we estimate the economic benefit to the state of Arizona in reduced fuel costs to be \$489 million per year by 2030.<sup>2</sup>

<sup>1</sup> Mr. Siebel could speak to both residential and commercial approaches.

<sup>2</sup> Source: *Air Quality and Economic Benefits of Electric Vehicles in Arizona*, <http://www.swenergy.org/publications/documents/AZ%20EV%20AirQuality.EconAnalysis.9.26.13%20.pdf>



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SWEEP recommends the following expert to discuss this topic:

- Will Toor, Transportation Director, Southwest Energy Efficiency Project. Contact: [wtoor@swenergy.org](mailto:wtoor@swenergy.org) and (303) 447-0078 x6

The Commission may also find the following SWEEP reports useful to its investigation:

- *Air Quality and Economic Benefits of Electric Vehicles in Arizona* (2013), <http://www.swenergy.org/publications/documents/AZ%20EV%20AirQuality.EconAnalysis.9.26.13%20.pdf>
- *Electric Vehicles Can Buffer Arizona from the Economic Shocks of Rising Fuel Prices, Create Jobs, and Reduce Pollution Control Costs* (2011), <http://www.swenergy.org/publications/documents/Using%20EVs%20to%20Protect%20Arizona%27s%20Economy%20From%20Petroleum%20Fuel%20Price%20Shocks.pdf>

### 5. Combined Heat and Power

Combined Heat and Power (CHP) has several benefits. It gives large businesses and industries more control over their energy decisions, more freedom to manage their own energy supply, more options for reducing energy costs, and greater assurance of high reliability. The economic advantages and potential cost savings from CHP and other improvements to energy efficiency would allow Arizona businesses to invest more money in jobs, exports, and innovation. Arizona citizens would also benefit from a stronger, more resilient electricity infrastructure and reduced overall air pollution.

While CHP has significant benefits, regulatory structures inhibit its adoption, including the lack of standardized, statewide interconnection rules. (In fact, Arizona is one of seven states without such standards.) These standards would provide clear and uniform processes and technical requirements for safely connecting new CHP systems to the electricity grid. SWEEP believes a streamlined interconnection process and clear standard would reduce uncertainty, prevent delays, and ensure that the requirements are appropriate for the size, scope, and technology of the different systems being considered for deployment.

SWEEP recommends the following experts to discuss this topic:

- Patti Case, MSc, P.E., ETC Group, LLC. Contact: [plcase@etcgrp.com](mailto:plcase@etcgrp.com) or (801) 278-1927
- Christine Brinker, Director, U.S. Department of Energy CHP Technical Assistance Partnerships, and Senior Associate, Southwest Energy Efficiency Project. Contact: [cbrinker@swenergy.org](mailto:cbrinker@swenergy.org) or 720-939-8333.



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Thank you for the opportunity to submit these comments.

Respectfully submitted this 23<sup>rd</sup> day of January 2014 by:

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Jeff Schlegel & Ellen Zuckerman  
Southwest Energy Efficiency Project

ORIGINAL and thirteen (13) copies filed this 23<sup>rd</sup> day of January 2014, with:

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